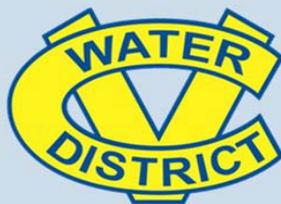




COACHELLA VALLEY  
WATER DISTRICT



2019 Crop Report

# Table of Contents

---

Introduction.....	3
Executive Summary.....	4
Crop Values and Accumulated Values.....	6
Acreage and Accumulated Acreage.....	7
5-Year History of Crops by Value.....	8
Historical Crop Value Charts.....	9
5-Year History of Crops by Acreage.....	14
Historical Crop Acreage Chart.....	15
Top 10 Charts - Value and Acreage.....	20
Acreage Irrigated - Not Harvested.....	21
Crop Acreage by Irrigation Method Chart.....	21
Canal Water Consumption Chart.....	22
Appendix.....	23
• 2019 Irrigation Method Map.....	24
• USBR Crop and Data Report: Explanation of Data.....	25
• USBR Crop and Water Data Report: Form 7-2045.....	26
• USBR Form 7-2045 Legend.....	28
• Definitions.....	29

# Introduction

---

***Making every drop count...***

***Since 1918***

The 2019 Coachella Valley Water District (CVWD) Crop Report summarizes the crop types, crop acreages, irrigation methods, and the estimated gross value of agricultural production within CVWD's Improvement District No. 1 (ID1). The CVWD Crop Report also summarizes, on a monthly basis, the measured Colorado River water delivered inside and outside of ID1. The total water consumption also includes deliveries to the Mid-Valley Pipeline for non-potable consumption and to the Thomas E. Levy Groundwater Replenishment Facility for groundwater replenishment. This report does not report groundwater production within CVWD's boundary, inside or outside ID1. Groundwater production numbers can be referenced in the CVWD Engineer's Report on Water Supply and Replenishment Assessment 2020-2021 on CVWD's web page at:

<http://www.cvwd.org/203/West-Whitewater-River-Subbasin>.

The values in this report represent the gross value of products and do not reflect costs associated with production, marketing, or transportation. No attempt has been made to reflect the net income, profit, or loss to producers.

The acreages in this report represent all seasonal vegetables, permanent crops, non-bearing permanent crops, polo fields, golf courses, and wetlands located inside ID1.

CVWD provides customers Colorado River or canal water for seasonal vegetables and permanent crops, including bearing and non-bearing date trees, grapes, figs, mangoes, peaches, and citrus varieties. Other uses of canal water include irrigation for polo fields, golf courses inside and outside ID1, maintenance of wetland areas such as duck ponds, and replenishment of the groundwater basin. Since customers utilize both canal and groundwater in the production of crops this report should not be used to determine the actual crop water consumption on a per acre basis.

# Executive Summary

---

The 2019 gross production is valued at \$596,307,212, which represents a 1.8% increase over the 2018 value of \$585,715,889. The 2019 gross farmed acreage (primary and secondary) is 64,340 acres, which represents a 4% increase compared to the 2018 gross farmed acreage of 61,933 acres. The increase in cropped acreage is attributed to new permanent crops planted to replace previously removed permanent crops. There has been a steady decline in grape production value and acreage and a steady increase in date production value and acreage. The crop values represent only crops grown inside ID1.

**Crop Values:** The top 7 crops by both value and acreage were Grapes, Dates, Bell Peppers, Lemon-Lime, Turf Grass, Carrots, and Lettuce. These crops accounted for 70% of the accumulated crop value and 58% of the total cropped acreage. The first two tables provide a summary of all crop values and acres, pages 6-7.

**Crop Value Trends:** The overall crop value trend has been mostly decreasing since 2015 as can be seen on the third table, 5-Year History of Crops by Value. The individual crops with significant uptrends were Dates, Cauliflower, and Celery, while Grapes and Lemon-Limes continue with a downtrend in value. Please refer to the tables and graphs on pages 8 – 13 for a detailed 5-year trend of the top 10 crops by value.

**Crop Acreage Trends:** Overall, the amount of acreage in production has decreased by about 4,000 acres. The major crops contributing to this down trend are Grapes and Bell Peppers. All other top ten crops by acres planted seem to remain relatively flat. See the tables and graphs on crops by acreage on pages 14- 19 for further details by crop.

**Last Table Explanation:** The charts on pages 20 - 22 depict the 5-year history of acreage irrigated but not harvested, crop acreage by irrigation method, and the total canal water consumption by month. These tables show trends in irrigation methods and how that affects the amount of canal water consumed by CVWD agricultural customers.

In 2019, CVWD continued to utilize Geographic Information Systems (GIS) mapping software to identify crops and accurately measure crop acreage. GIS has become an essential part of crop reporting methods. The GIS maps are useful when trending cropping types and irrigation methods. Please see an example of the irrigation methods map in the appendix for output from CVWD's GIS mapping software.

This report also contains the annual US Bureau of Reclamation Crop and Water Data, Form 7-2045 as supplemental data to the CVWD Crop Report. The USBR Form 7-2045 is

required of all Colorado River Contractors and is used to document crop acreage, production, price, and Colorado River Water used inside and outside ID1, including water to the customers served off the Mid-Valley pipeline. A further explanation of the source of data in the USBR form 7-2045 is located in the appendix to this report.

# 2019 Crop Values and Accumulated Values

Crop Description	Value	%	Accumulated		
			Value	%	
Dates	\$93,737,102	15.7	\$93,737,102	15.7	T o p  S e v e n
Grapes	\$92,309,568	15.5	\$186,046,670	31.2	
Bell Peppers	\$70,125,000	11.8	\$256,171,670	43.0	
Golf Course Turf	\$55,366,584	9.3	\$311,538,254	52.2	
Lemon-Lime	\$36,279,750	6.1	\$347,818,004	58.3	
Carrots	\$31,279,896	5.2	\$379,097,900	63.6	
Lettuce	\$30,963,310	5.2	\$410,061,210	68.8	
Orange-Tangerine	\$17,247,300	2.9	\$427,308,510	71.7	
Nursery-Trees	\$15,487,200	2.6	\$442,795,710	74.3	
Oriental Vegetables	\$13,977,600	2.3	\$456,773,310	76.6	
Cauliflower	\$11,006,304	1.8	\$467,779,614	78.4	
Green Bean	\$10,266,828	1.7	\$478,046,442	80.2	
Turf Grass	\$10,211,201	1.7	\$488,257,643	81.9	
Artichoke	\$9,036,288	1.5	\$497,293,931	83.4	
Sweet Corn	\$8,777,034	1.5	\$506,070,965	84.9	
Misc. Fish Farm	\$8,601,595	1.4	\$514,672,560	86.3	
Broccoli	\$8,542,498	1.4	\$523,215,058	87.7	
Spinach	\$7,240,288	1.2	\$530,455,346	89.0	
Celery	\$7,078,016	1.2	\$537,533,362	90.1	
Mangoes	\$6,669,000	1.1	\$544,202,362	91.3	
Okra	\$6,072,000	1.0	\$550,274,362	92.3	
Polo Fields	\$4,687,410	0.8	\$554,961,772	93.1	
Grapefruit	\$4,651,490	0.8	\$559,613,262	93.8	
Eggplant	\$4,228,211	0.7	\$563,841,473	94.6	
Spice	\$3,994,779	0.7	\$567,836,252	95.2	
Cabbage	\$3,396,870	0.6	\$571,233,122	95.8	
Melon-Watermelon	\$3,038,409	0.5	\$574,271,531	96.3	
Kale	\$2,688,576	0.5	\$576,960,107	96.8	
Tomatoes	\$2,602,105	0.4	\$579,562,212	97.2	
Nursery-Plants	\$2,566,860	0.4	\$582,129,072	97.6	
Potatoes	\$2,523,546	0.4	\$584,652,618	98.0	
Squash	\$1,854,000	0.3	\$586,506,618	98.4	
Parsley	\$1,765,176	0.3	\$588,271,794	98.7	
Chili Peppers	\$1,696,556	0.3	\$589,968,350	98.9	
Hay-Alfalfa/Pasture	\$1,567,830	0.3	\$591,536,180	99.2	
Sugar Beets	\$663,480	0.1	\$592,199,660	99.3	
Olives	\$619,630	0.1	\$592,819,290	99.4	
Figs	\$592,881	0.1	\$593,412,171	99.5	
Bokchoy	\$582,150	0.1	\$593,994,321	99.6	
Radish	\$510,200	0.1	\$594,504,521	99.7	
Strawberries	\$450,000	0.1	\$594,954,521	99.8	
Turnip	\$307,723	0.1	\$595,262,244	99.8	
Corn	\$283,579	0.0	\$595,545,823	99.9	
Misc. Fruit/ Duck Ponds	\$273,588	0.0	\$595,819,411	99.9	
Onion-Green	\$246,013	0.0	\$596,065,424	100.0	
Peaches	\$241,787	0.0	\$596,307,211	100.0	
	\$ 596,307,211	100.0			

FIGURE 1: Top seven crops by value are also the top seven crops by acreage.

# 2019 Acreage and Accumulated Acreage

Crop Description	Acres	%	Accumulated		
			Acres	%	
Dates	8769	13.6	8,769	13.6	T o p  S e v e n
Golf Course Turf	6024	9.4	14,793	23.0	
Grapes	5965	9.3	20,758	32.3	
Lemon-Lime	4575	7.1	25,333	39.4	
Carrots	4495	7.0	29,828	46.4	
Bell Peppers	4250	6.6	34,078	53.0	
Lettuce	3236	5.0	37,314	58.0	
Sweet Corn	1699	2.6	39,013	60.6	
Dates - N/B	1678	2.6	40,691	63.2	
Oriental Vegetables	1664	2.6	42,355	65.8	
Cauliflower	1479	2.3	43,834	68.1	
Pasture-Permanent/ Pasture	1443	2.2	45,277	70.4	
Broccoli	1148	1.8	46,425	72.2	
Orange-Tangerine	1146	1.8	47,571	73.9	
Turf Grass	1111	1.7	48,682	75.7	
Nursery-Trees	1080	1.7	49,762	77.3	
Spice	1073	1.7	50,835	79.0	
Grapes- N/B	1058	1.6	51,893	80.7	
Lemon-Lime - N/B	877	1.4	52,770	82.0	
Green Bean	858	1.3	53,628	83.4	
Hay-Alfalfa	852	1.3	54,480	84.7	
Artichoke	848	1.3	55,328	86.0	
Celery	830	1.3	56,158	87.3	
Duck Ponds	775	1.2	56,933	88.5	
Okra	640	1.0	57,573	89.5	
Cabbage	616	1.0	58,189	90.4	
Potatoes	591	0.9	58,780	91.4	
Spinach	546	0.8	59,326	92.2	
Polo Fields	510	0.8	59,836	93.0	
Grapefruit	427	0.7	60,263	93.7	
Melon-Watermelon	423	0.7	60,686	94.3	
Kale	418	0.6	61,104	95.0	
Hay-Sudan	406	0.6	61,510	95.6	
Onion-Green	352	0.5	61,862	96.1	
Squash	309	0.5	62,171	96.6	
Misc. - Fish Farm	265	0.4	62,436	97.0	
Tomatoes	253	0.4	62,689	97.4	
Orange-Tangerine - N/B	242	0.4	62,931	97.8	
Eggplant	197	0.3	63,128	98.1	
Nursery-Plants	179	0.3	63,307	98.4	
Figs	138	0.2	63,445	98.6	
Mangoes	117	0.2	63,562	98.8	
Chili Peppers	104	0.2	63,666	99.0	
Bokchoy	98	0.2	63,764	99.1	
Sugar Beets	97	0.2	63,861	99.3	
Olives	86	0.1	63,947	99.4	
Parsley	79	0.1	64,026	99.5	
Misc. Fruit	77	0.1	64,103	99.6	
Turnip/Peaches/Strawberries	75	0.1	64,178	99.7	
Radish	73	0.1	64,251	99.9	
Corn	45	0.1	64,296	99.9	
Peaches N/B	44	0.1	64,340	100.0	
	64,340	100.0			

FIGURE 2: Top seven crops by acreage are also the top seven crops by value. N/B = Non-bearing.

# 5-Year History of Crops by Value

Crop Description	2015	2016	2017	2018	2019
Dates	\$41,383,440	\$40,138,560	\$50,136,000	\$77,859,000	\$93,737,102
Grapes	\$156,300,300	\$145,993,515	\$133,659,918	\$109,391,868	\$92,309,568
Bell Peppers	\$119,680,501	\$77,733,600	\$74,192,512	\$67,866,593	\$70,125,000
Golf Course Turf	\$93,824,406	\$104,388,255	\$83,531,814	\$63,253,079	\$50,927,746
Lemon-Lime	\$104,388,255	\$83,531,814	\$63,253,079	\$50,927,746	\$36,279,750
Carrots	\$27,203,400	\$28,632,144	\$30,405,510	\$26,651,500	\$31,279,896
Lettuce	\$28,344,615	\$25,092,600	\$25,207,326	\$23,904,664	\$30,963,310
Orange-Tangerine	\$14,082,984	\$12,863,725	\$10,237,447	\$10,933,103	\$17,247,300
Nursery-Trees	\$26,971,420	\$18,357,072	\$18,953,334	\$17,104,784	\$15,487,200
Oriental Vegetables	\$14,474,250	\$7,230,300	\$10,046,355	\$10,360,770	\$13,977,600
<b>Top Ten Crops</b>	<b>\$626,653,571</b>	<b>\$543,961,585</b>	<b>\$499,623,295</b>	<b>\$458,253,107</b>	<b>\$452,334,472</b>
Other Crops	\$117,655,727	\$85,584,348	\$104,359,798	\$127,462,782	\$143,972,740
<b>All Crops Combined</b>	<b>\$744,309,298</b>	<b>\$629,545,933</b>	<b>\$603,983,093</b>	<b>\$585,715,889</b>	<b>\$596,307,212</b>

FIGURE 3: Total crop value declined 21% 2015 to 2018 and rose 1% 2018 to 2019. "Top Ten Crops" for 2019.



Basil



Onions

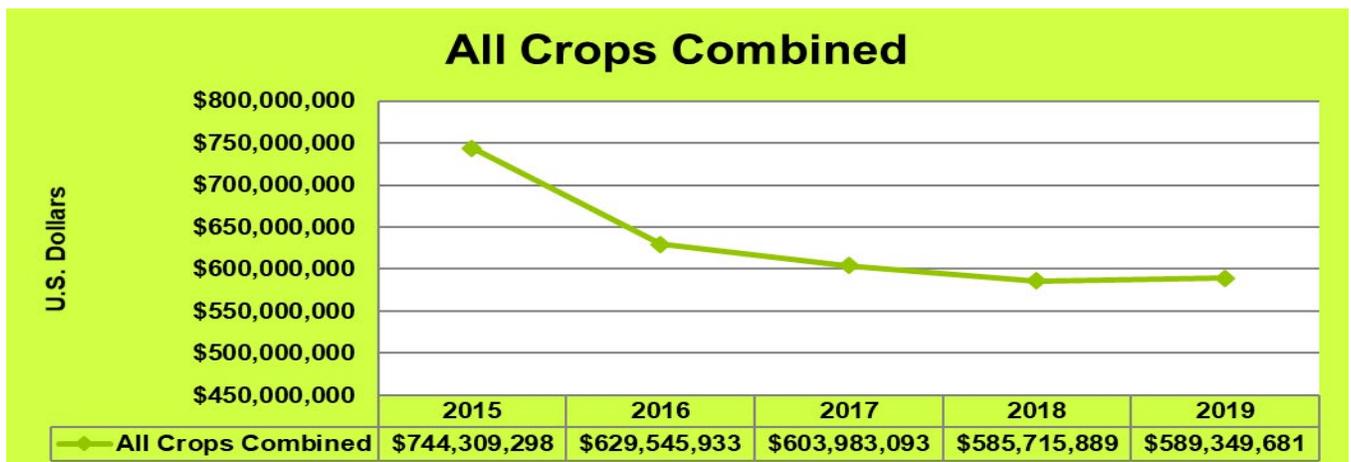


FIGURE 4: Total crop values decreased since 2015, but rose slightly last year.

\* Total Gross Production

# Historical Crop Value Charts

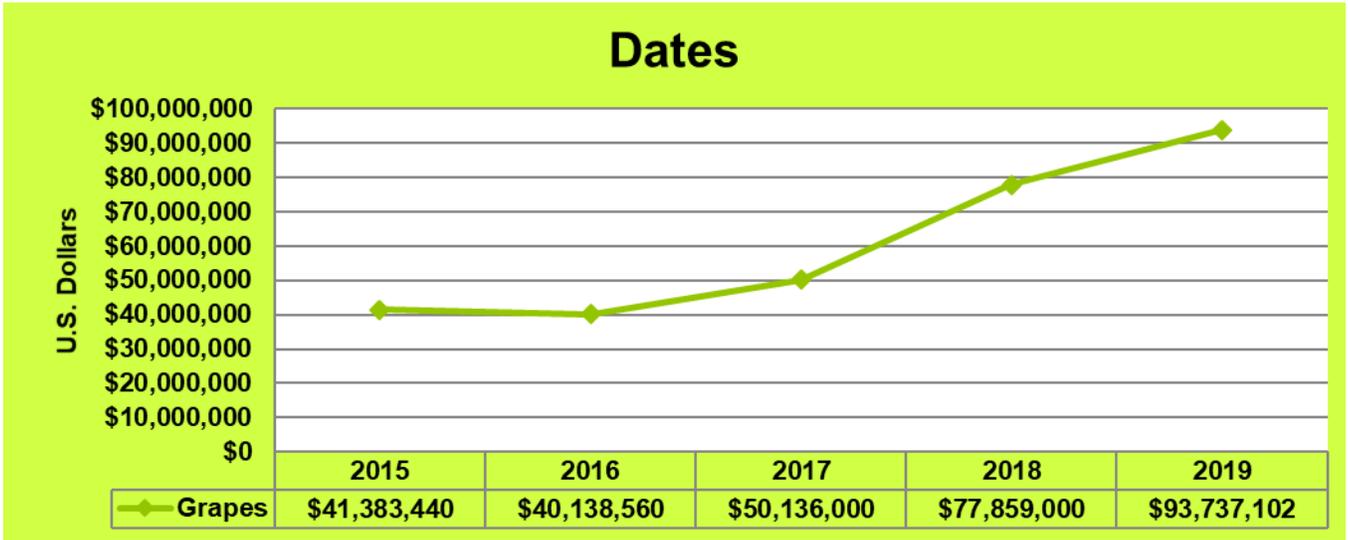


FIGURE 5: Date crops increased in value by 134% from 2016 to 2019.



Date Palms



Grapes

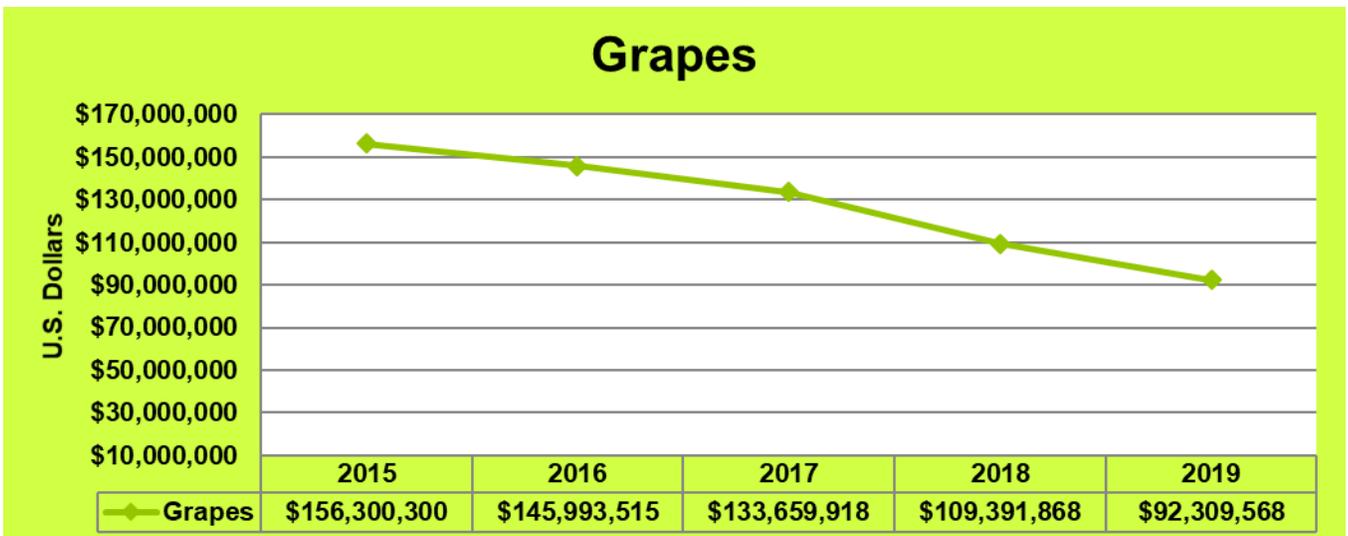


FIGURE 6: Grape crop values show a steady downward trend of 41% from 2015 to 2019.

## Bell Peppers



FIGURE 7: After a jump in 2015, bell pepper values remain relatively flat.



Bell Peppers



Golf Course Turf

## Golf Course Turf

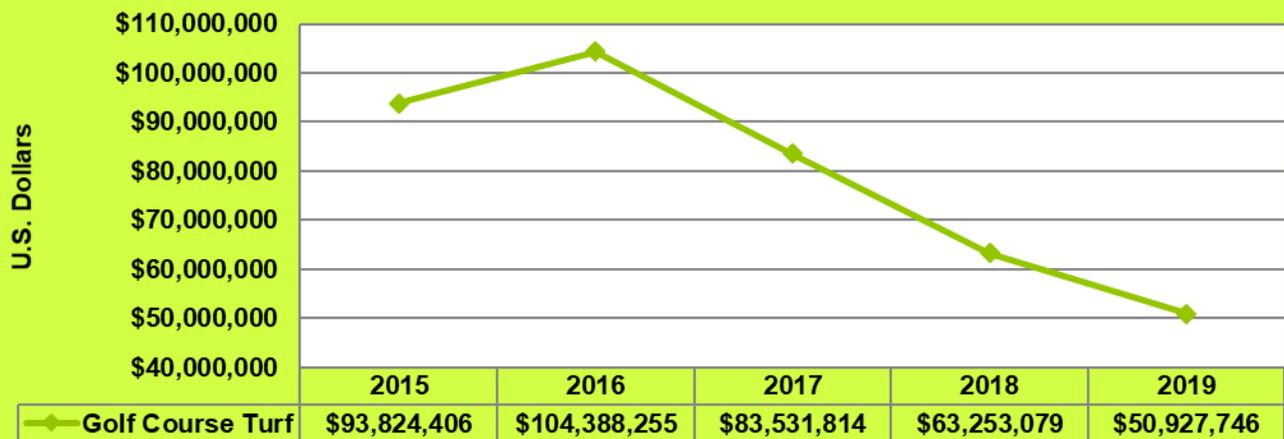


FIGURE 8: Golf course turf values have declined 51% from 2016 to 2019.

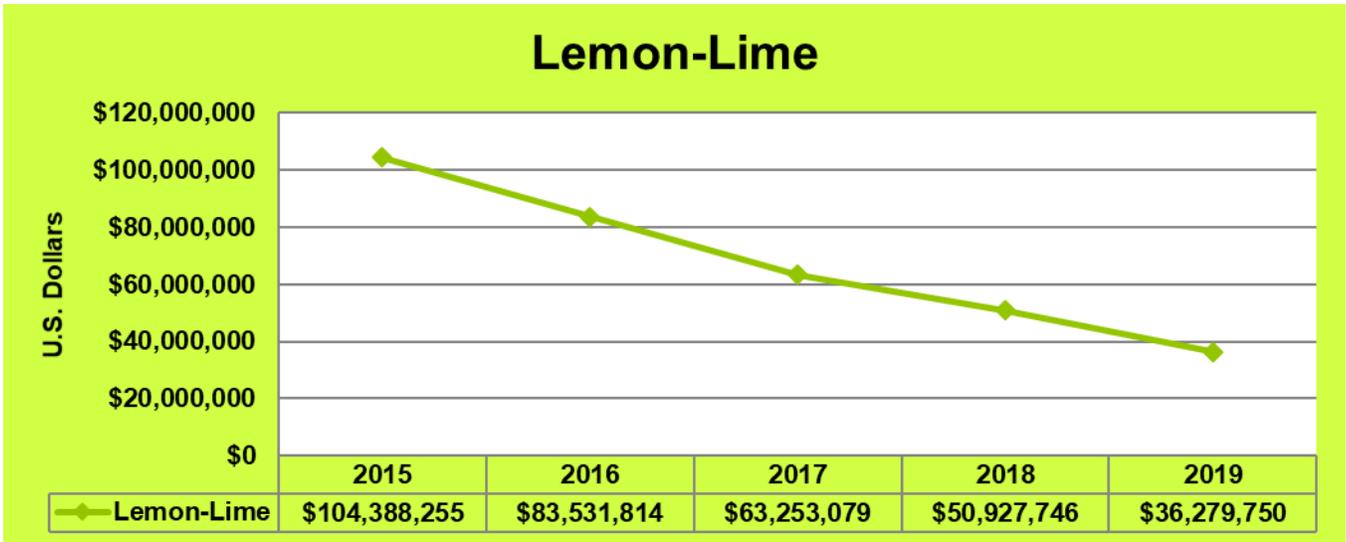


FIGURE 9: Lemon-lime values have declined 65% from 2015 to 2019.



Lemons



Carrot Field

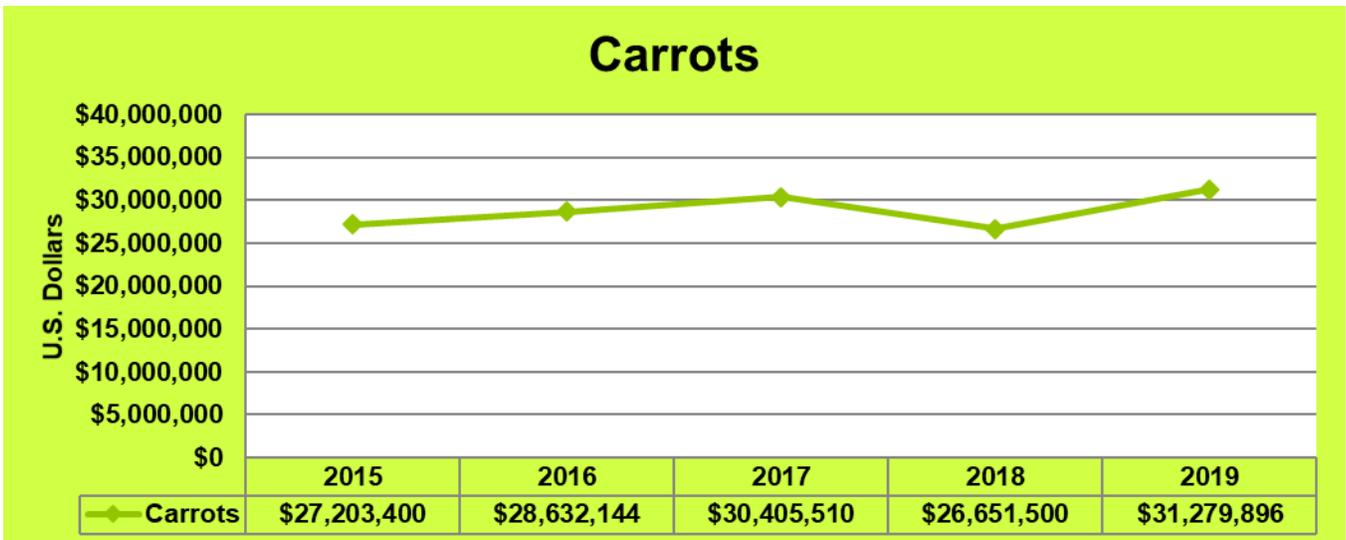


FIGURE 10: After a dip in 2018, carrot values continue their gentle climb.

## Lettuce



FIGURE 11: Lettuce values climbed 30% from 2018 to 2019.



Lettuce



Oranges

## Orange-Tangerine

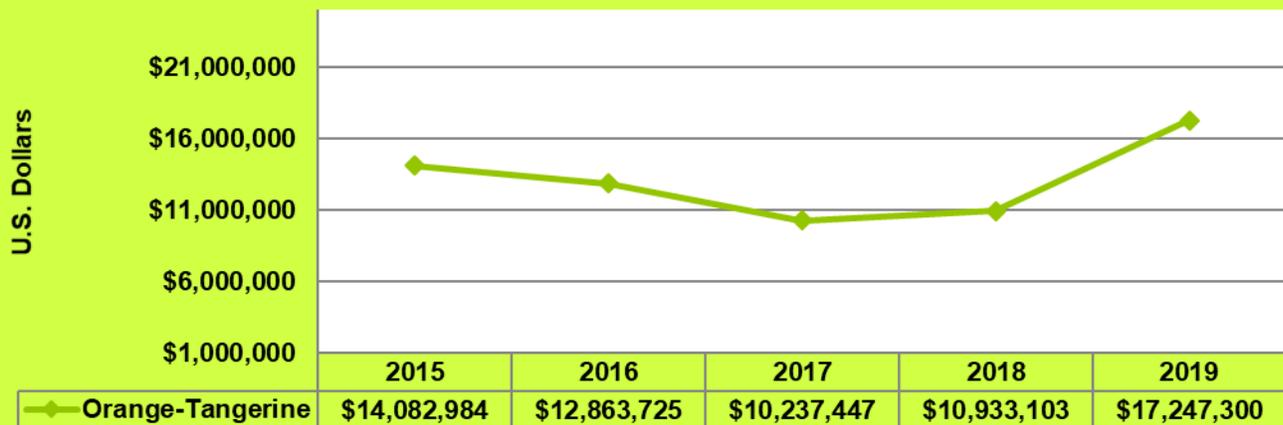


FIGURE 12: Orange-tangerine values have jumped 58% from 2018 to 2019.

## Nursery-Trees

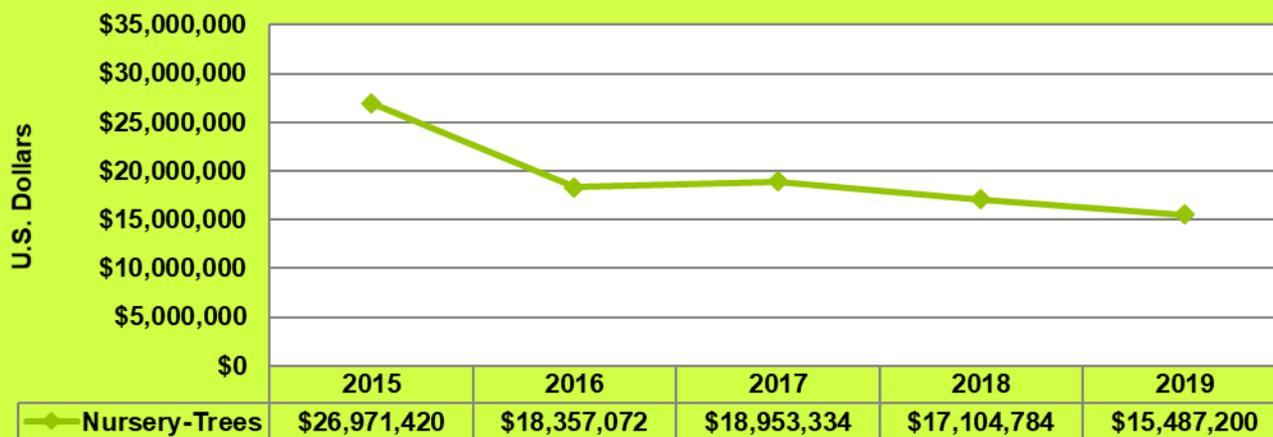


FIGURE 13: Nursery-tree values have declined 43% from 2015 to 2019, including a 10% decline 2018 to 2019.



Nursery



Bok Choy

## Oriental Vegetables



FIGURE 14: After a 50% drop 2015 to 2016, oriental vegetable values have nearly doubled in value 2016 to 2019.

# 5-Year History of Crops by Acreage

Crop Description	2015	2016	2017	2018	2019
Dates	8211	7964	8356	8651	8769
Golf Course Turf	6043	6043	6043	6043	6024
Grapes	7592	7379	7129	6283	5965
Lemon-Lime	3902	3927	4111	4339	4575
Carrots	4572	4777	5927	4886	4495
Bell Peppers	5044	5288	4506	3479	4250
Lettuce	2930	3217	3240	3071	3235
Sweet Corn	1279	1883	1249	1843	1698
Dates - N/B	1878	2170	1633	1525	1678
Oriental Vegetables	1838	1050	1639	1437	1663
<b>Top Ten Crops</b>	<b>43289</b>	<b>43698</b>	<b>43833</b>	<b>41557</b>	<b>42352</b>
Other Crops	23318	22919	22213	20376	21988
<b>All Crops Combined</b>	<b>66607</b>	<b>66617</b>	<b>66046</b>	<b>61933</b>	<b>64340</b>

FIGURE 15: Total acreage dropped 571 acres in 2017 and 4113 acres in 2018, then gained 2407 acres in 2019.



Eggplant



Sweet Corn



Fish Farm

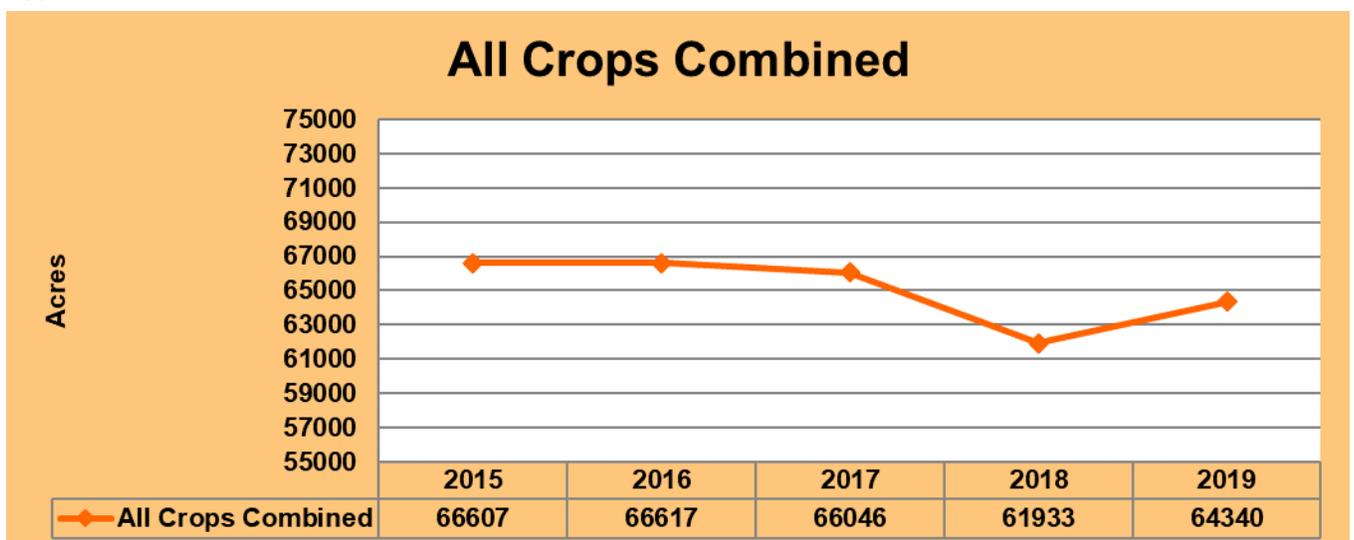


FIGURE 16: Total acreage dropped 6% in 2018, then gained 4% in 2019.

# Historical Crop Acreage Chart

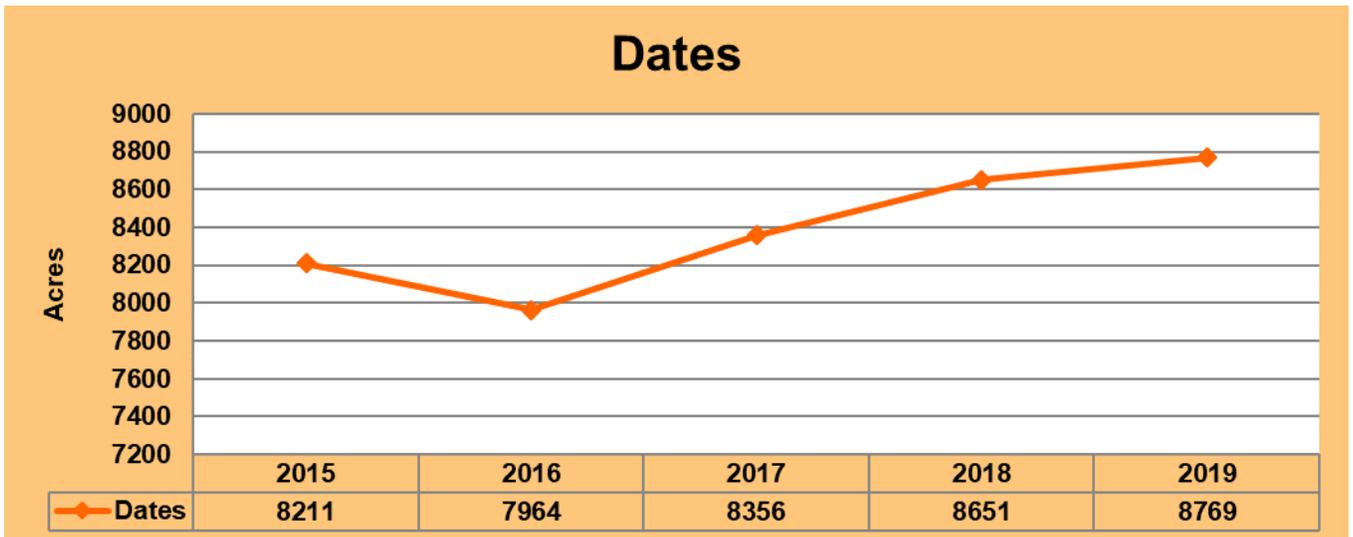


FIGURE 17: Date palm acreage has risen 805 acres (10%) from 2016 to 2019.



Date Palms



Golf Course



FIGURE 18: Golf course turf acreage has been holding very steady.

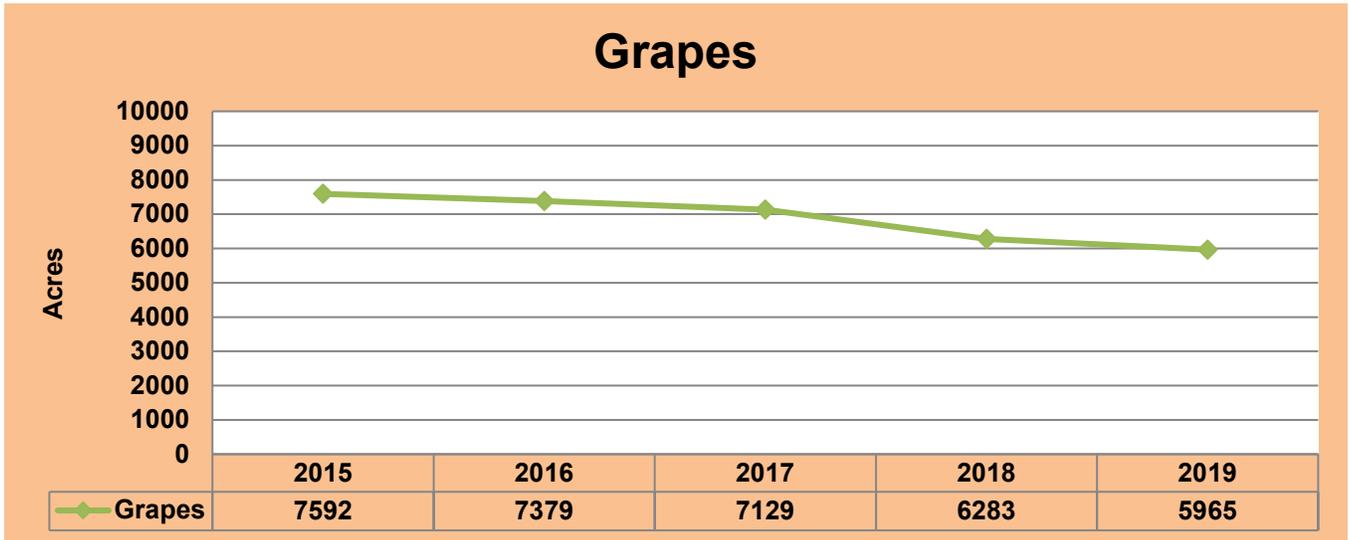


FIGURE 19: Grape acreage has declined 21% from 2015 to 2019.



Grapes



Lemons

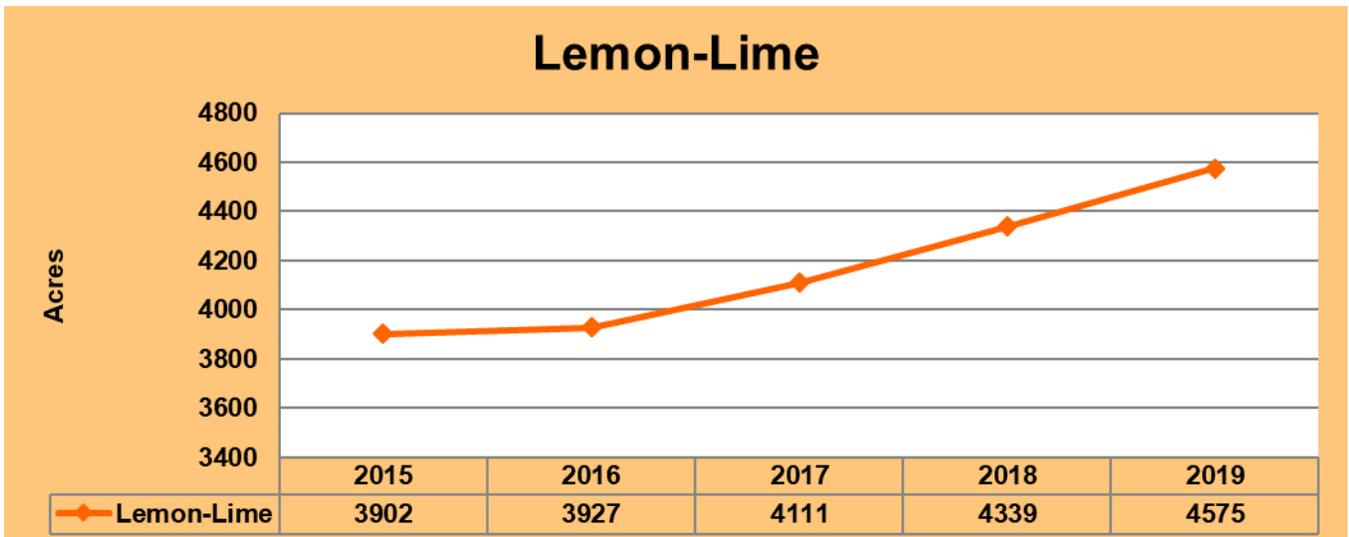


FIGURE 20: Lemon-lime acreage has climbed 17% from 2015 to 2019.

## Carrots

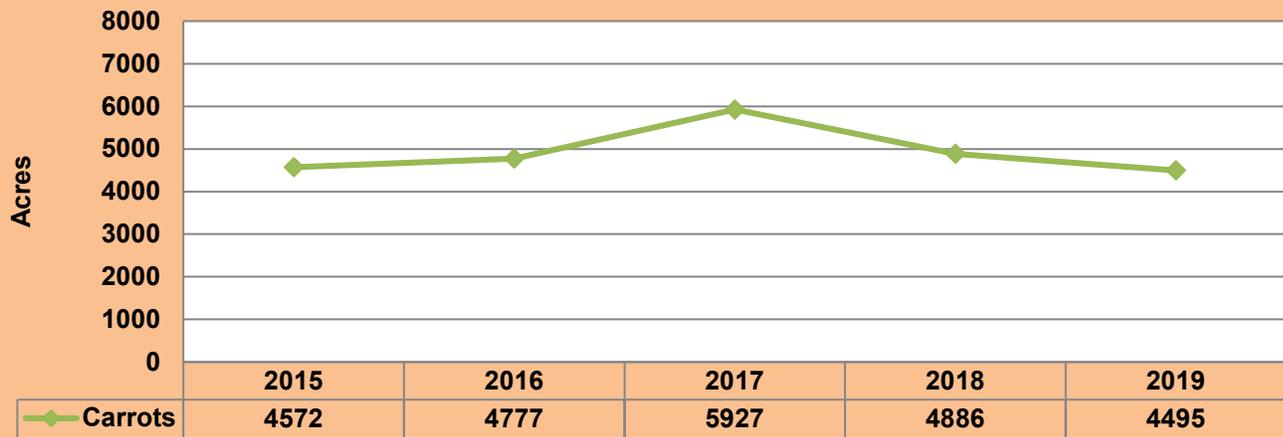


Figure 21: After a peak in 2017, carrot acreage has declined 24% from 2017 to 2019.



Carrot Field



Bell Pepper Seedlings

## Bell Peppers

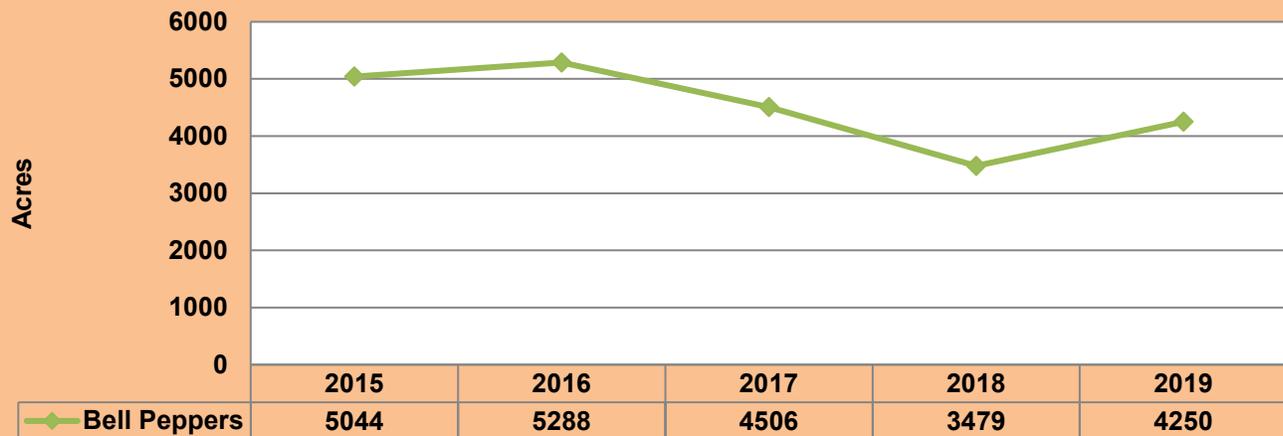


FIGURE 22: After dropping 34% from 2016 to 2018, bell pepper acreage increased 22% from 2018 to 2019.

## Lettuce

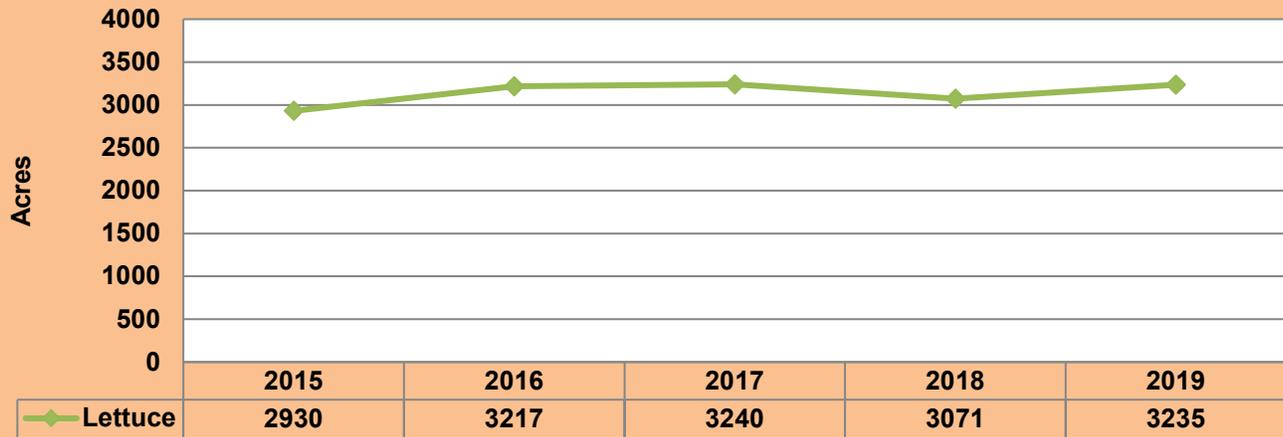


FIGURE 23: Lettuce acreage dipped 5% in 2018 followed by a 5% increase from 2018 to 2019.



Rows of Lettuce



Sweet Corn

## Sweet Corn

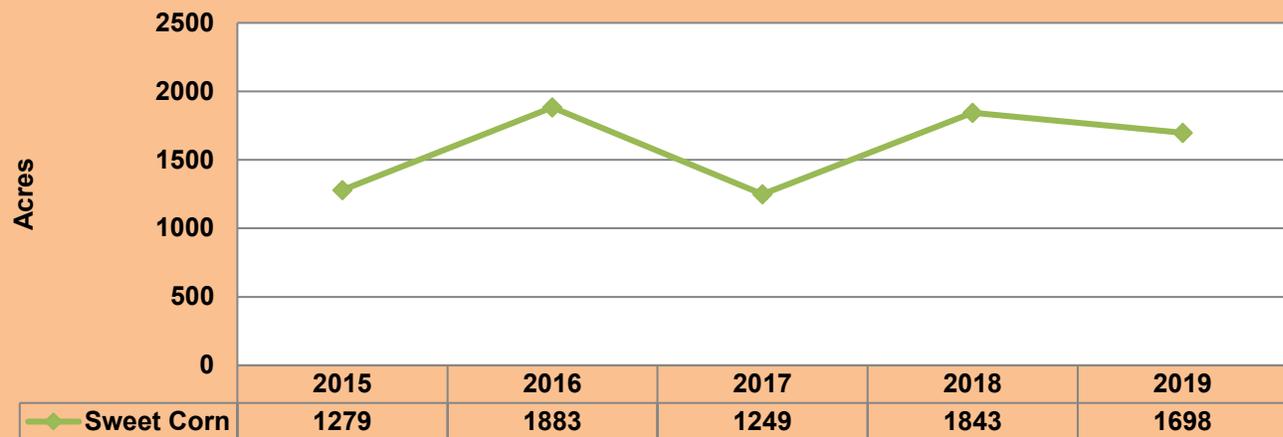


FIGURE 24: After an increase of 48% from 2017 to 2018, sweet corn acreage declined 8% from 2018 to 2019.

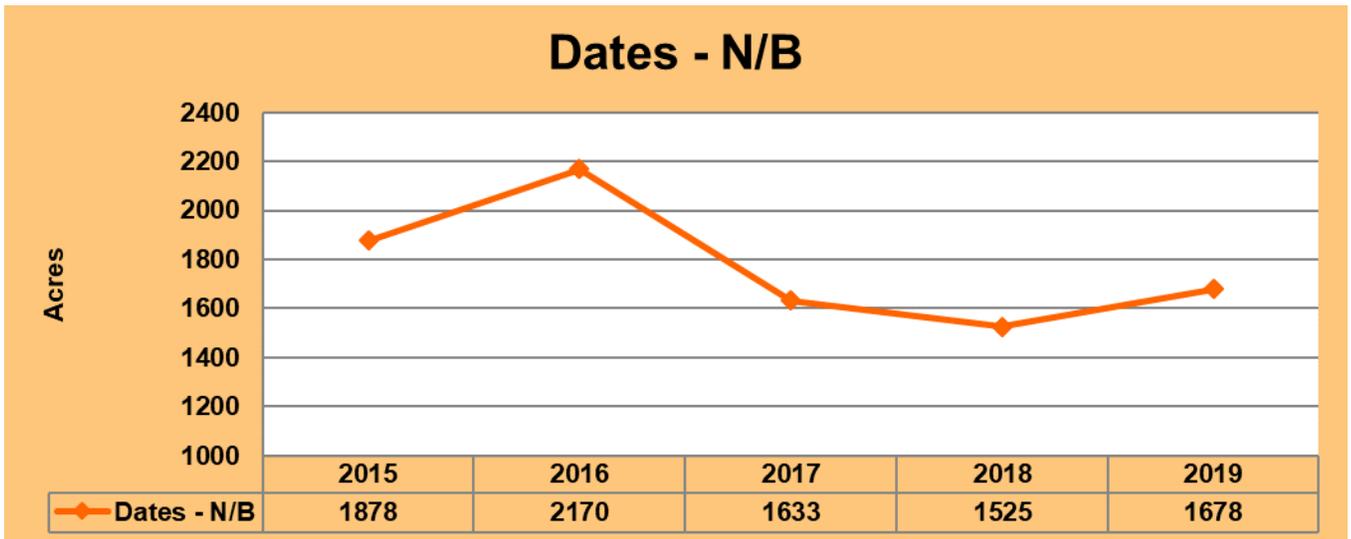


FIGURE 25: After declining 30% from 2016 to 2018, non-bearing date acreage increased 10% from 2018 to 2019.



Date Palm Shoots



Chinese Broccoli

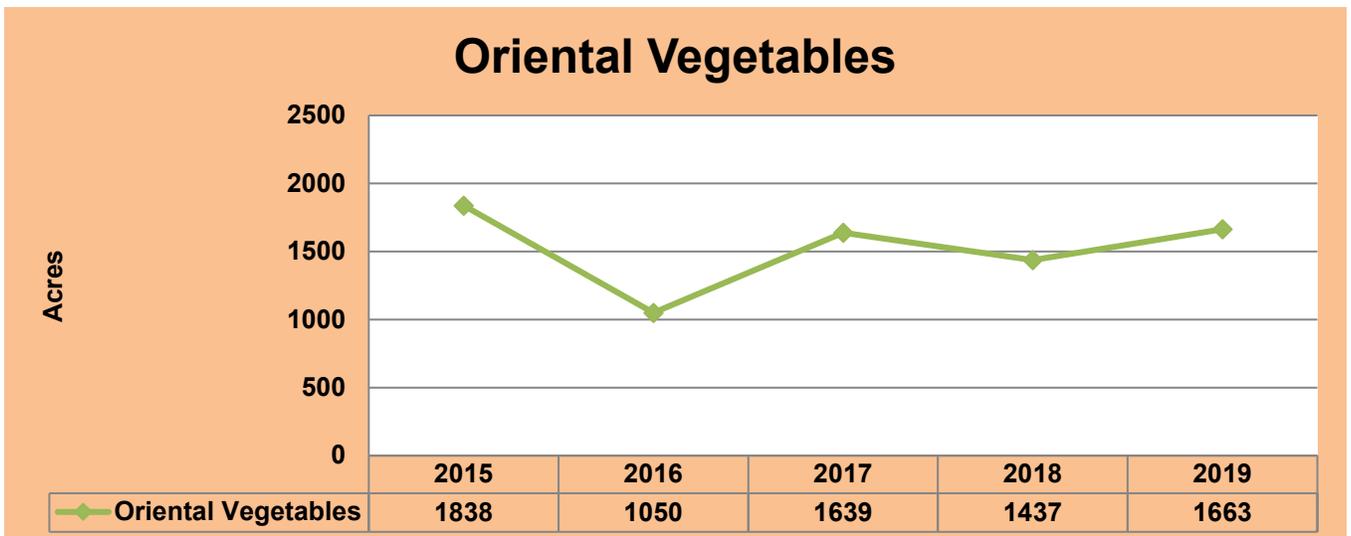


FIGURE 26: Oriental vegetable acreage jumped 26% from 2016 to 2017 and increased 16% from 2018 to 2019.

# Top 10 Charts - Value & Acreage

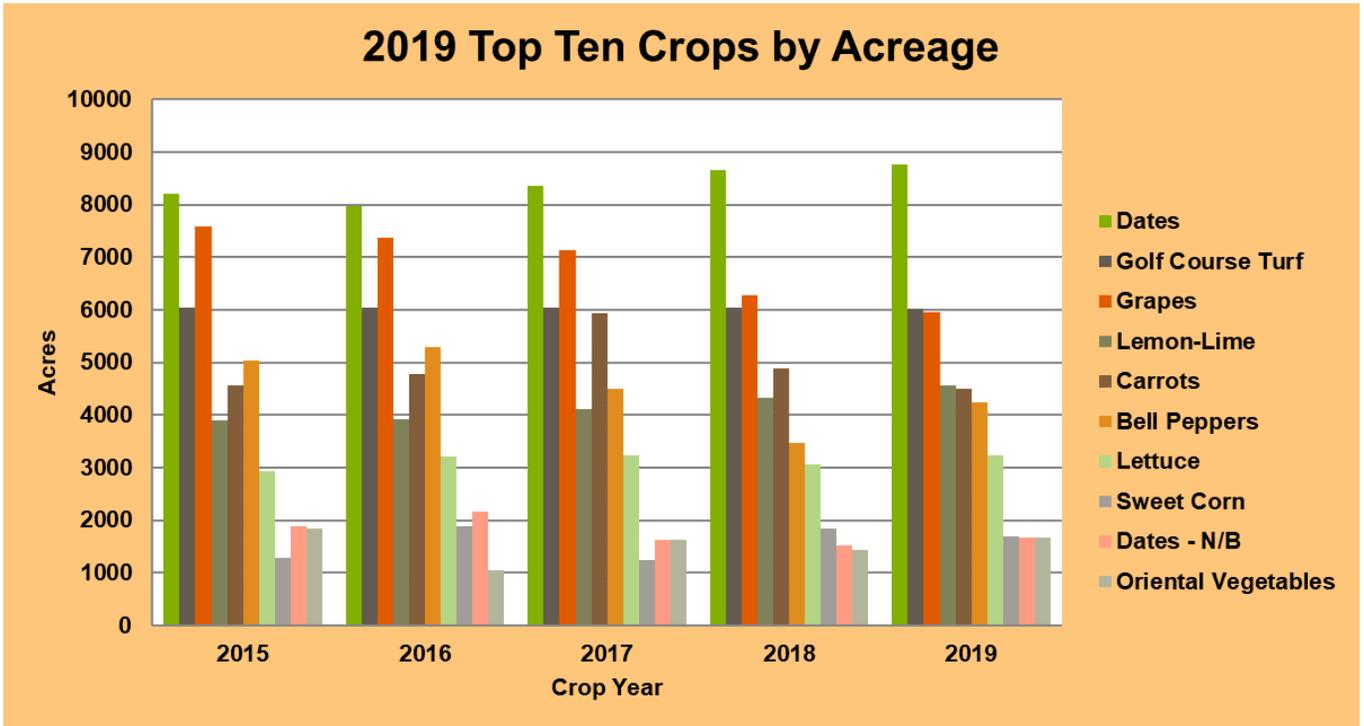


FIGURE 27: Chart shows increase in date palm acreage and decrease in grape acreage.

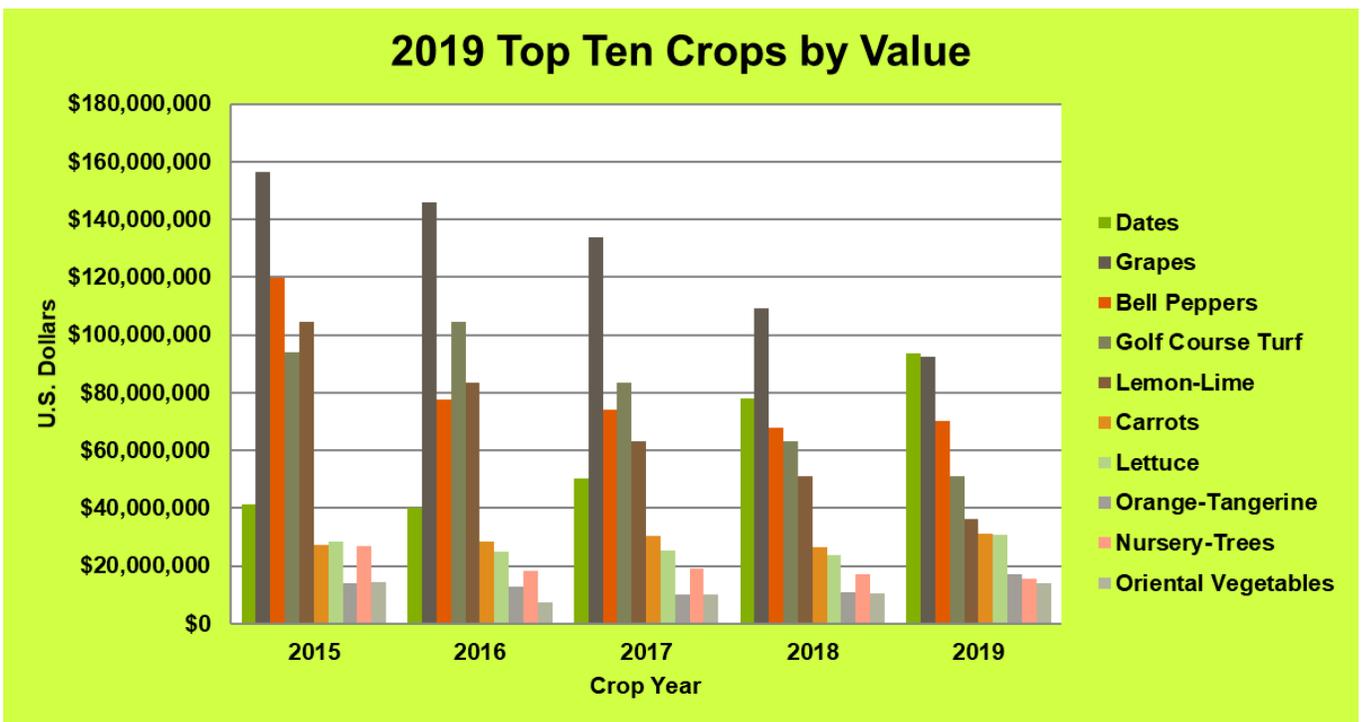


FIGURE 28: Chart shows decrease in grape values and increase in date values.

# Acreage Irrigated - Not Harvested

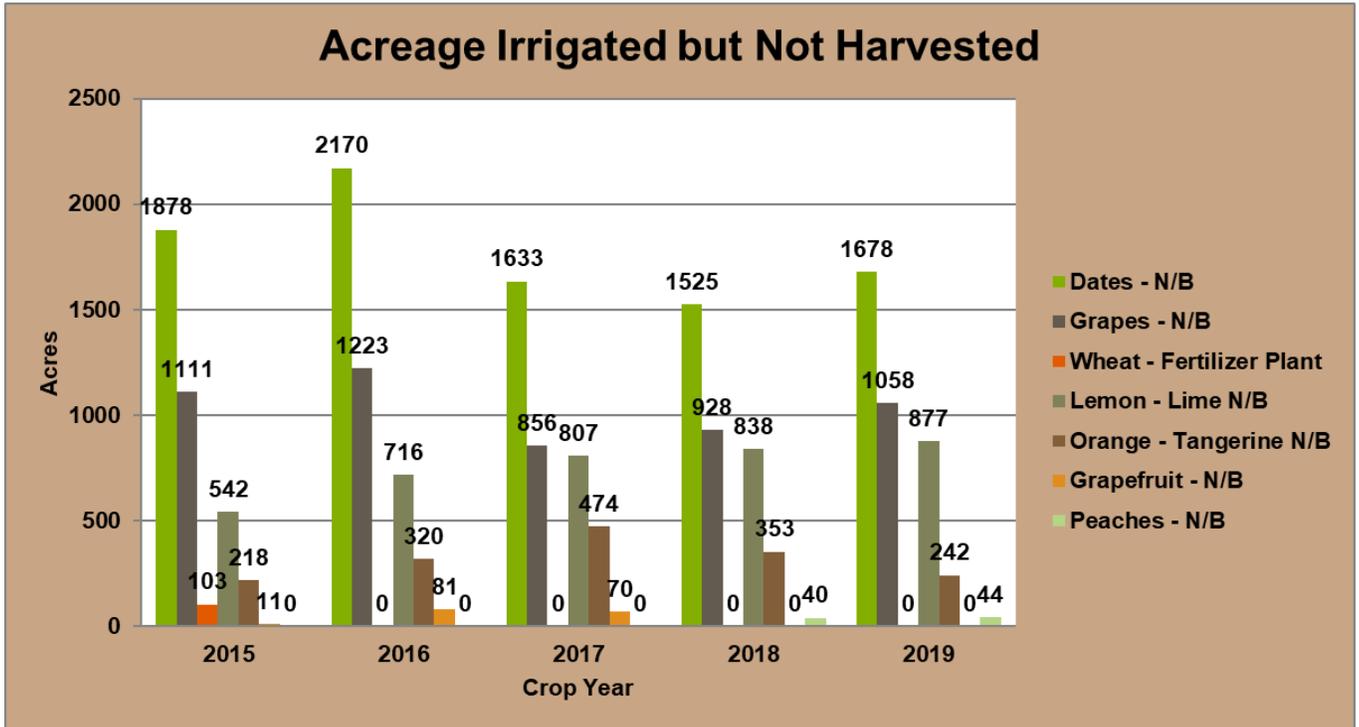


FIGURE 29: "N/B" for "non-bearing".

# Crop Acreage by Irrigation Method Chart

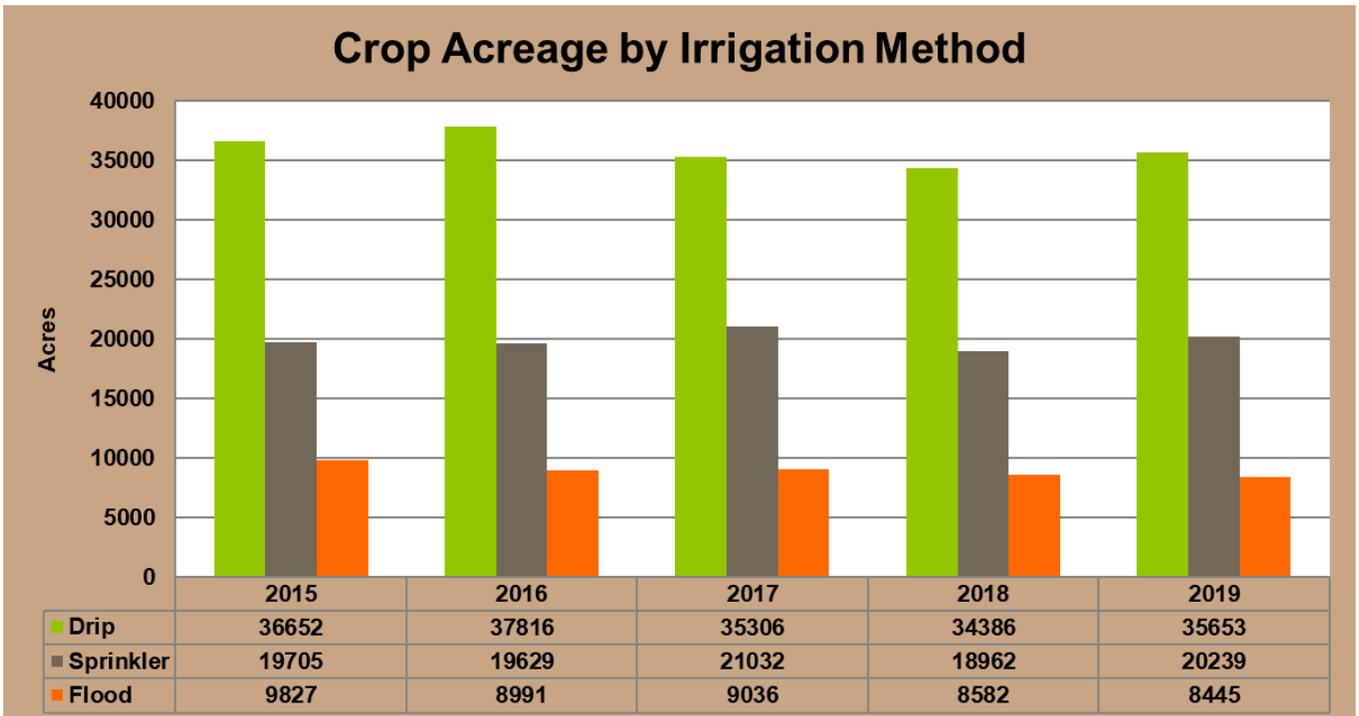


FIGURE 30: Acres using flood irrigation decreased 14% from 2015 to 2019.

# Canal Water Consumption

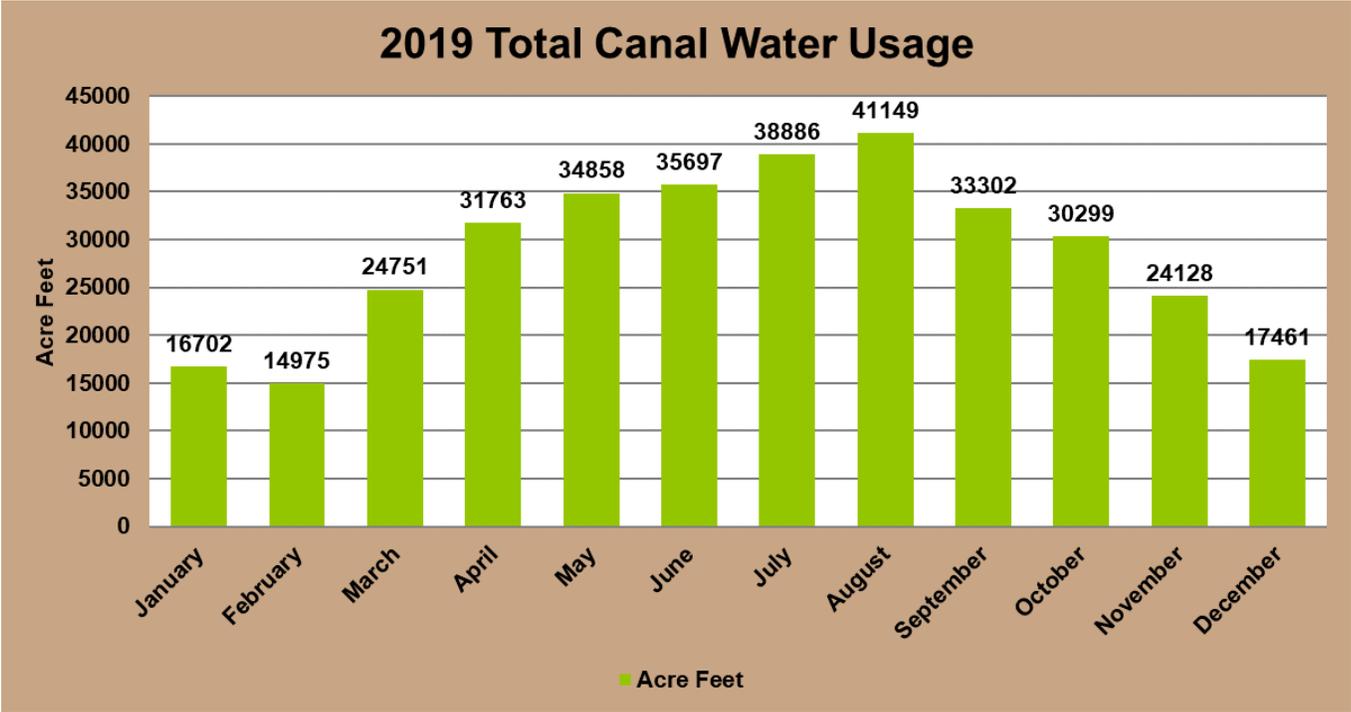


FIGURE 31: Seasonal variation in canal water usage. August 2019 was 175% higher than February 2019.



Coachella Canal

# Appendix

---

2019 Irrigation Method Map.....	24
USBR Crop and Water Data Report: Explanation of Data.....	25
USBR Crop and Water Data Report: Form 7-2045.....	26
USBR Form 7-2045 Legend.....	28
Definitions.....	29

# 2019 Irrigation Method Map

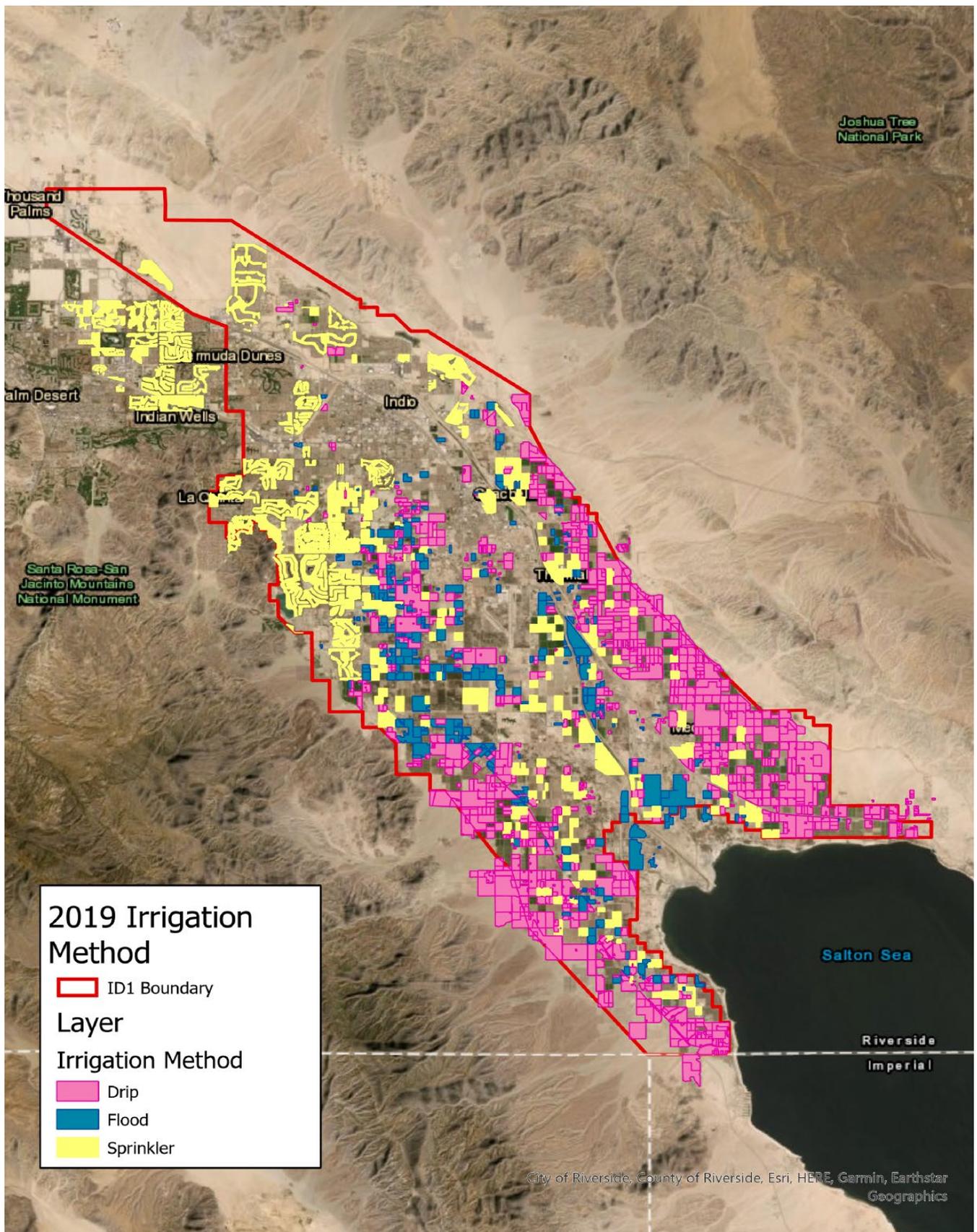


FIGURE 32: Color coded map indicates differences in irrigation method by area.

# United States Bureau of Reclamation (USBR) Crop and Water Data Report

## *Explanation of Data found in Report*

The 2019 United States Bureau of Reclamation (USBR) Crop and Water Data, form 7-2045, represent the crop types, crop acreages, estimated crop yield, irrigation method and irrigation water distributed to customers within the Coachella Valley Water District (CVWD) service area and Improvement District 1 (ID1). This report represents only imported Colorado River Water and not groundwater production within CVWD's service area.

Sections I and II of form 7-2045 include the total district acres (inside ID1), irrigable acres, commercial acres, non-commercial acres, multiple-cropped acres, acres irrigated, acres irrigated but not harvested, and idle/fallow acreage. The irrigable acres are calculated using GIS mapping technology and field verified three times per year by CVWD staff.

Section III of form 7-2045 includes the crop type, crop acreage, yields per acre, and total yields per ton. CVWD staff calculate the crop type and crop acreage with GIS mapping software and through a field verification process. The crop yield and value data is obtained from the County of Riverside Agricultural Commissioner's Office.

Section IV of form 7-2045 includes monthly water distribution data for all Colorado River Water Supply, Operational Spills, Transportation Losses, Non-Agricultural Deliveries (M&I, Wildlife, Misc.), and Water Delivered to Farms.

The monthly water delivered section includes all Colorado River Water that is conveyed through the Coachella Canal and sold to CVWD customers. The accounting of this water includes water exported outside of ID1 for Golf Course Use and Groundwater Replenishment. The water used outside of ID1 data is located in the Non-Agricultural Deliveries (M&I, Wildlife, Misc.) columns of form 7-2045. The described uses of this water can be further broken down by:

1. M&I: Construction Water and East Valley Groundwater Replenishment
2. Wildlife: Water to Dos Palmas Reserve and Wildlife Drinkers.
3. Misc: Golf Courses including the Mid-Valley Pipeline, Hunting Clubs, Polo Fields, and Fish Farms.

All published data on groundwater production collected by CVWD is in the Engineer's Report on Water Supply and Replenishment Assessment 2019-2020. You can reference this report on the CVWD website, [www.cvwd.org](http://www.cvwd.org)

**FORM 7-2045**

**COACHELLA VALLEY WATER DISTRICT**  
**Zanjero Section**  
**CROP AND WATER DATA**  
 Year **2019**

**SECTION I - DISTRICT INFORMATION**

a. Region **LC** | b. IDCON **304560** | c. Cong. Dist. **36th** | d. Project: **Boulder Canyon Project** | e. Division: **Coachella Division**  
 f. Unit: **NA** | g. Water District: **Coachella Valley Water District** | h. State: **CA** | i. Counties: **Riverside**  
 j. Total District Acres: **137,416** | k. Irrigable Acres: **77,103** | l. Contact Person: **Eric Morales** | m. Telephone: **(760)398-2661 Ext. 2629**

**SECTION II - DISTRICT LANDS IN AN IRRIGATION ROTATION**

a. Type of Service (mark one)  Full  Supplemental  Temporary | b. Commercial Acres **53,485** | c. Non-commercial **2,630** | d. Multi-cropped Acres **6,952**  
 e. Acres irrigated by: Sprinkler: **20,239** | Drip: **35,653** | Flood: **8,445** | f. Acres irrigated but not harvested **3,899** | g. Acres not Irrigated:  Dry Cropped |  Fallow **9,620** |  Idle **7,469**  
 h. Permanent Urbanization & Raw Land Acres: **60,323**

**SECTION III - CROP PRODUCTION**

a. CROPS	b. ACRES	c. UNIT	d. YIELD		a. CROPS	b. ACRES	c. UNIT	d. YIELD		
			PER ACRE	TOTAL				PER ACRE	TOTAL	
<b>CEREALS</b>										
50 Barley (malt)	0	Bu	0.00	0	54 Rice	0	Cwt	0	0	
51 Barley (feed)	0	Bu	0.00	0	56 Sorghums (sorgo, kaffir, milo, ect.)	0	Cwt	0	0	
52 Corn	45	Bu	5356.50	241,043	57 Wheat	0	Bu	0.00	0	
53 Oats	0	Bu	0.00	0	58 Other Cereals (specify)	0	Bu	0	0	
<b>FORAGE</b>										
61 Alfalfa hay	852	Ton	9.0	7,668	Silage (sorgo, kaffir, milo, etc.)	0	Ton	0	0	
62 Other hay (Sudan) (Fertilizer)	406	Ton	5.5	2,233	Other forage (specify)	0	Ton	0	0	
63 Irrigated pasture	1,422	AUM	1.00	1,422						
<b>MISCELLANEOUS FIELD CROPS</b>										
81 Beans, dry and edible	0	Cwt	0	0	86 Hops	0	Lb	0	0	
82 Cotton: Lint (Upland)	0	Lb	0	0	87 Mints	0	Lb	0	0	
83 Cotton: Seed (Upland)		Ton	0	0	90 Soybeans	0	Bu	0	0	
84 Cotton: Lint (American-Pima)	0	Lb	0	0	89 Sugar beets	97	Cwt	24,000	2,328,000	
85 Cotton: Seed (American-Pima)		Ton	0	0	91 Other field crops (specify) polo, turf, golf course	7,645	Ton	9.1	69,570	
<b>VEGETABLES</b>										
101 Asparagus	0	Cwt	0.00	0	117 Onions, dry	0	Cwt	0.00	0	
102 Beans, (processing)	0	Ton	0	0	118 Onions, green	352	Cwt	101.50	35,728	
103 Beans, (fresh market)	858	Cwt	86.80	74,474	119 Peas, green (processing)	0	Cwt	0	0	
104 Broccoli	1,148	Cwt	182.85	209,912	120 Peas, green (fresh market)	0	Cwt	0.00	0	
105 Cabbage	616	Cwt	565	348,040	121 Peppers (all kinds)	4,354	Cwt	450	1,951,531	
106 Carrots	4,495	Ton	940	4,225,300	122 Potatoes, early	591	Ton	17.40	10,283	
107 Cauliflower	1,479	Cwt	131.56	194,577	124 Squash	309	Cwt	16,000	4,944,000	
108 Celery	830	Cwt	935.40	776,382	100 Sweet Potatoes	0	Cwt	0	0	
109 Corn, sweet (processing)	0	Cwt	0	0	125 Tomatoes (canning)	0	Ton	0	0	
110 Corn, sweet (fresh market)	1,699	Cwt	202.50	344,048	126 Tomatoes (fresh market)	253	Cwt	374	94,622	
111 Cucumbers	0	Cwt	0.00	0	127 Other vegetables (specify) artichoke	848	Cwt	165.60	140,429	
112 Greens, (b.choy spinach, O.veg.etc.)	2,726	Cwt	328.591	895,740	egg plant	197	Cwt	260	51,220	
113 Lettuce	3,236	Cwt	404.95	1,310,418	okra	640	Cwt	150	96,000	
					radishes	73	Cwt	599.55	43,767	
					spices	1,152	Ton	2.04	119,872	

CROP PRODUCTION CONTINUED											
a. CROPS	b. ACRES	c. UNIT	d. YIELD		a. CROPS	b. ACRES	c. UNIT	d. YIELD			
			PER ACRE	TOTAL				PER ACRE	TOTAL		
<b>NURSERY</b>											
137	Total nursery (show yield in dollars)	1,259		14340.0	18,054,060	138	Fish farm	265	Ton	6.27	1662
						139	Duck ponds	775	Lb	9.65	7479
<b>SEED CROPS</b>											
141	Alfalfa	0	Lb	0	0	146	Onion	0	Cwt	0	0
142	Clover	0	Lb	0	0	147	Pea	0	Cwt	0	0
143	Corn	0	Lb	0	0	148	Potato	0	Cwt	0	0
144	Grass	0	Lb	0	0	149	Sugar beet	0	Cwt	0	0
145	Lettuce	0	Lb	0	0	150	Other seed, (specify)	0	Cwt	0	0
<b>FRUITS</b>											
161	Apples	0	Lb	0	0	165	Grapefruit	427	Cwt	205.76	87,861
162	Apricots	0	Ton	0	0	115	Honey Ball, Honeydew, ect.	0	Cwt	0.00	0
158	Avocados	0	Ton	0	0	166	Lemons and Limes	4,575	Cwt	231.80	1,060,485
163	Berries,	0	Lb	0	0	171	Olives	86	Ton	5.50	473
114	Cantaloupe	0	Cwt	0	0	167	Oranges and Tangerines	1,146	Cwt	700.00	802,200
164	Cherries	0	Ton	0	0	172	Peaches	16	Lb	10389.28	166,228
168	Dates	8,769	Cwt	544	4,770,336	173	Pears	0	Ton	0	0
159	Figs	138	Ton	0.06	8	174	Prunes and Plums	0	Ton	0	0
169	Grapes, table	5,965	Cwt	5.36	31,953	160	Strawberries	15	Cwt	180	2,700
176	Grapes, raisin	0	Ton	0	0	116	Watermelon	423	Cwt	22,000	9,306,000
177	Grapes, wine	0	Ton	0	0	175	Other fruits (specify) Mangoes	117	Cwt	95.00	11,115
170	Grapes, other	0	Ton	0	0						
<b>NUTS</b>											
181	Almonds	0	Lb	0	0	183	Walnuts	0	Lb	0	0
182	Pecans	0	Lb	0	0	184	Other nuts (specify)	0	Lb	0	0
180	Pistachios	0	Lb	0	0						

SECTION IV - MONTHLY WATER DISTRIBUTION								
a. TYPE OF IRRIGATION SERVICE								
		<input checked="" type="checkbox"/> Full		<input type="checkbox"/> Supplemental		<input type="checkbox"/> Temporary		
b. MONTH	c. WATER SUPPLY	d. OPERATIONAL SPILLS	e. TRANSPORTATION LOSSES	f. NON-AGRICULTURAL DELIVERIES			g. DELIVERED TO FARMS	
				(1) M&I	(2) Wildlife	(3) Misc.		
<b>1. PROJECT WATER (Acre-Feet)</b>								
201	January	16,702.0	386.5	1,193.7	3,219.8	375.5	1,027.8	10,499.2
202	February	14,975.0	406.9	1,525.7	2,155.8	403.7	855.8	9,627.1
203	March	24,751.0	544.0	1,331.5	3,208.1	566.5	2,046.1	17,054.8
204	April	31,763.0	615.5	1,967.9	3,116.5	569.8	3,940.6	21,552.7
205	May	34,858.0	662.2	465.0	3,356.6	753.5	4,674.8	24,946.3
206	June	35,697.0	597.9	-420.7	3,286.5	503.5	5,456.3	26,273.5
207	July	38,886.0	791.7	1,778.0	3,111.7	587.7	5,737.8	26,879.1
208	August	41,149.0	584.1	130.7	3,269.6	428.0	5,956.0	30,780.6
209	September	33,302.0	622.6	1,649.0	2,977.5	398.2	3,601.8	24,052.9
210	October	30,299.0	636.5	1,317.5	3,193.8	137.9	4,729.3	20,284.0
211	November	24,128.0	487.7	574.2	2,942.7	64.0	3,007.6	17,051.8
212	December	17,461.0	571.3	499.7	2,937.3	62.0	1,589.8	11,800.9
213	TOTAL PROJECT WATER	343,971.0	6,906.9	12,012.2	36,775.9	4,850.3	42,623.7	240,802.9
214	M&I Population Served				0.0			
<b>2. NONPROJECT WATER (Acre-Feet)</b>								
216	Annual Data	0.0	0.0	0.0	0.0	0.0	0.0	0.0
217	TOTAL (lines 213 and 216)	343,971.0	6,906.9	12,012.2	36,775.9	4,850.3	42,623.7	240,802.9

c. Data obtained from USBR Boulder Canyon Operations Office Lower Colorado River Water Accounting

# USBR Form 7-2045 Legend

Section I District Information and Section II District Lands in Irrigation Rotation	
	<p><u>Acreage Formula</u>                      k. Irrigable Acres = b. Commercial Acres + c. Non-commercial acres + f. Acres irrigated but not harvested + g. Acres not Irrigated Fallow and Idle</p>
Section IV Monthly Water Distribution	
	c. Water Supply = Supply from AAC to Coachella Canal minus IID customers usage
	d. Operational Spills = Measured Regulatory Water
	e. Transportation Losses = Total Water Supply – (Water Sold + Regulatory Water)
	<p>f. Non Agricultural Deliveries (Class 2 type of User)</p> <p style="margin-left: 40px;">(1) M&amp;I = Construction Water and East Valley Groundwater Replenishment</p> <p style="margin-left: 40px;">(2) Wildlife = Water to Dos Palmas Preserve and the Wildlife Drinkers</p> <p style="margin-left: 40px;">(3) Misc. = Golf Courses, hunting clubs, polo fields, and fish farms</p>
	g. Delivered to farms = Class 1 type of user commercial agricultural activities.

# Definitions

---

The following definitions of terms are provided to assist you in understanding the categories listed in the Form 7-2045.

<b>Total District Acres</b>	This acreage includes all acres within the district boundaries, including, farmsteads, roads, ditches, drains, dry cropped, idle, fallow, and grazed. This also includes all irrigable land for service and irrigable land not for service.
<b>Irrigable Acres</b>	The arable land under a specific plan for which water supply is or can be made available and which is provided with or planned to be provided with irrigation, drainage, flood protection, and other facilities, as necessary for sustained irrigation.
<b>Full Irrigation Service</b>	Applies to irrigable land now receiving, or to receive, its sole and generally adequate irrigation water supply through works or facilities constructed by or to be constructed by the Bureau of Reclamation. This term also applies to previously irrigated land in non-Federal projects where a substantial portion of the facilities has been or is to be constructed, rehabilitated, or replaced by Reclamation. Full irrigation service may be applicable to several types of land, such as regular projects, Warren Act, special contract, leased or water rental lands.
<b>Commercial Acres</b>	All irrigated acres that include harvested cropland and pasture in the irrigation rotation for land classes 1 through 5.
<b>Non-Commercial Acres</b>	Urban, Suburban, and Industrial acres. Nonagricultural irrigable land in residential, commercial, and industrial uses that include town areas, residential developments, suburban residences, industrial developments, etc.
<b>Multi-Cropped Acres</b>	Acres on which a second or successive crop is grown on the same land during the calendar year.
<b>Acres Irrigated By</b>	Total acres irrigated by a specific irrigation method including sprinkler, drip, and flood.
<b>Acres Irrigated But Not Harvested</b>	Crops planted but not harvested due to crop failure, adverse market conditions, etc. Also includes young non-bearing fruit trees and vines.

## Section IV – Monthly Water Distribution

<b>Type of Service</b>	Full service when all lands are provided all irrigation water by Reclamation project. Supplemental water is when irrigation water comes from Reclamation project and non-project source. Temporary water service is when irrigation water is provided under a temporary arrangement from Reclamation.
<b>Project Water</b>	All water deliveries are in acre-feet per month. Total Project water is the amount of water diverted by irrigation district for irrigation purposes.
<b>Water Supply</b>	Measured water diversion of project water delivered to the district.
<b>Operational Spills</b>	Amount of project water lost through operational spill, measured regulatory water.
<b>Transportation Losses</b>	The project water lost through seepage, evaporation, and evapotranspiration from plants on the canal bank.
<b>M&amp;I Deliveries</b>	Project water delivered for Municipal and Industrial use such as water that is treated for potable use.
<b>Wildlife Deliveries</b>	Project water delivered for wildlife refuges or mitigation area.
<b>Miscellaneous Deliveries</b>	Project water delivered to urban and suburban lands, which includes rural residences with less than \$1,000 in gross agricultural sales. Non-potable water customers in Class 2 type of user (golf course, polo fields, duck club, lakes, etc.)
<b>Delivered to Farms</b>	Total water delivered to agricultural customers in Class 1 type of user who use canal water for commercial.
<b>Gross Farmed Acreage</b>	Area mapped and classified in a given survey.

## Land classes and subclasses of the USBR system

Six land classes based on production economics are normally recognized. Brief descriptions are as follows:

- Class 1 - Arable**                      Lands that are highly suitable for irrigated farming, being capable of sustained and relatively high yield of climatically adapted crops at reasonable cost. These lands have a relatively high payment capacity.
- Class 2 - Arable**                      Lands that have a moderate suitability for irrigated farming. These are either adaptable to a narrower range of crops, more expensive to develop for irrigation, or less productive than Class 1. Potentially these lands have intermediate payment capacity.
- Class 3 - Arable**                      Lands that have a marginal suitability for irrigated farming. They are less suitable than Class 2 lands and usually have either a serious single deficiency or a combination of several moderate deficiencies in soil, topography, or drainage properties. Although greater risk may be involved in farming these lands than those of Class 1 and 2, under proper management they are expected to have adequate payment capacity.
- Class 4 - Special use Lands**                      Lands in the USA that are only suited to certain special uses (e.g. rice, pasture, or fruit) are classified 1, 2 or 3 (to reflect relative payment capacity) along with the appropriate letter designating the land use (crop).
- Class 5 - Non-arable**                      This land is temporarily considered as non-arable because of some specific deficiency such as excessive salinity, questionable drainage, flooding, or other deficiency which requires further studies to resolve. The deficiency or deficiencies are of such a nature and magnitude that special agronomic, economic, or engineering studies are required to resolve the costs or effect on the land. Class 5 designation is tentative and should be changed to either Class 6 or an arable classification during formulation of the recommended plan of development.
- Class 6 - Non-arable**                      Land that is non-arable under the existing or projected economic conditions associated with the proposed project development. Generally, Class 6 comprises steep, rough, broken, rocky, or badly eroded lands, or lands with inadequate drainage, or other deficiencies. In some instances lands considered to be Class 6 in one area may be arable in another area because of different economic conditions. In addition to various physical-type deficiencies that result in a non- arable classification, lands initially classified as arable (potentially irrigable) on the basis of payment capacity (farm financial analysis) may be found non-arable if subsequent economic analysis (benefit analysis) indicates that benefits from such lands are less than their costs in a plan of development. Thus, the lower arable class(es) of lands would be considered non-arable and, of course, non-irrigable for economic reasons.